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Solid Waste Master Plan Q&A
June 23, 2000

1. What is the Solid Waste Master Plan?

Massachusetts General Laws, Chapter 16, §21 requires DEP to develop and maintain a comprehensive statewide master plan for solid waste management. The first plan was published in 1990 and established source reduction and recycling goals to be achieved by the year 2000 and solid waste management policies and strategies for meeting the goals. The 1990 plan underwent major updates in 1994, 1995, and 1997.

The Beyond 2000 Solid Waste Master Plan charts a new course for the Commonwealth's solid waste policies for the coming decade. It sets new waste reduction milestones for the Year 2010 and updates our basic policies for waste reduction, recycling, and disposal.

2. What are the biggest problems Massachusetts is facing in managing its trash?

At the brink of a new century, there are many pressing solid waste issues to deal with. The amount of waste Massachusetts produces each year is increasing, placing a larger burden on municipal waste collection programs and straining available disposal capacity. Improvements in the recycling rate appear to be leveling off, resulting in more waste left over to dispose of. There are many fewer disposal facilities in Massachusetts than in the past. Many of these facilities are nearing the end of their design lives and it has become very difficult to site new facilities of any type, including recycling and transfer facilities. As a result we are exporting larger proportions of our waste to other states.

3. What are the key challenges we face in overcoming these problems?

The biggest challenge we face is changing the behavior of the many participants in the solid waste management system. Our vision for the coming decade is to maximize waste reduction and minimize disposal. We will not achieve this vision unless residents, businesses, institutions, and government take increased responsibility for reducing, reusing, and recycling waste. The waste industry must change its role by fully embracing waste reduction as its core business, providing the additional recycling infrastructure that is needed for us to achieve our goals.

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Manufacturers also must change their role by taking more responsibility for the products they produce so that they contain less toxics, create less waste, are easier to recycle.

One way to effect these behavioral changes is to forge partnerships to ensure that everyone takes responsibility for doing their share.

4. What are the goals being proposed by the new Master Plan?

The vision the Master Plan proposes is one where we continually work to reduce the quantity and toxicity of our waste to the maximum feasible extent, so that we dispose of the least amount of waste as possible. This is a long term vision that calls for significant changes in the behavior of the public and private sectors and even changes in how goods are produced. Achieving this vision is the ultimate goal of the Master Plan. The Plan proposes interim milestones for achieving the vision. By 2010:

- Achieve 70% waste reduction of municipal solid waste and construction and demolition debris (60% MSW waste reduction and 88% C&D waste reduction).
- Substantially reduce the use and toxicity of hazardous products and provide convenient hazardous product collection services to all residents and very small quantity hazardous waste generators.

It should be emphasized that these are interim milestones, and the goal is to go beyond these milestones in the longer term.

5. The Master Plan talks a lot about increasing waste reduction. What is waste reduction?

The Master Plan uses waste reduction as one of its key performance measures because it emphasizes and accounts for both source reduction and recycling. Source reduction includes waste that is avoided or never generated (e.g., making a product lighter or using less packaging), waste that is managed "at the source" (e.g., backyard composting), and waste that is sent off-site for reuse, reconditioning, or re-manufacturing and thus never enters the traditional waste management system. In some situations, increases in source reduction activities -- such as decreasing the size of a newspaper -- can decrease recycling since less material is produced and made available for recycling. Yet this is a good result because ultimately less waste is managed and disposed.

6. What are the key new initiatives proposed in the Master Plan?

In keeping with the Plan's vision, the Plan's key initiatives focus on increasing the Commonwealth's waste reduction capacity. Included are developing **source reduction** programs, launching a **Product Stewardship** initiative to lead manufacturers to take greater responsibility for the environmental impacts of the products they produce, pursuing **multi-family residential recycling legislation** to ensure recycling access to this sector, proposing a **disposal ban on unprocessed C&D waste**, requiring disposal facilities to implement **Recycling Benefits Plans** as a way to increase their role in ensuring recovery of recyclables from the waste stream, and significantly **enhancing waste ban enforcement**.

7. Are you lifting the disposal facility moratorium?

The draft Plan does identify a need for additional disposal capacity, even if our aggressive waste reduction milestones are met. Therefore, once the Plan is finalized this Fall, applicants for new or expanded landfills or combustors will be able to apply to DEP to meet the needed capacity. However, this capacity will be phased in over a number of years, enabling DEP to closely monitor waste generation and waste reduction rates to ensure that only the least amount of disposal capacity needed is permitted. In addition, applicants for any new or expanded disposal capacity will have to propose actions they will undertake to increase waste reduction [see #8 below].

8. Why is DEP allowing additional disposal capacity?

One of our key solid waste policies is that waste disposal capacity should be limited to the amount generated within the state that is not recycled, so that on balance we should be neither a net importer nor a net exporter of trash. In other words, Massachusetts should take responsibility for managing its own solid wastes. Currently, our management system is out of balance and Massachusetts is a net exporter of trash. To meet our goal of no net import or export, we must increase our management capacity. Our first priority for doing this is increasing our waste reduction capacity. However, even if we increase our waste reduction capacity to meet what we believe are aggressive yet achievable milestones, we will still need some additional disposal capacity to manage our waste. This capacity would replace the capacity that has been lost over the past few years due to the closure of older facilities

In permitting this capacity, we will continue to ensure the protection of public health and the environment and promote an integrated approach to waste management by:

- Requiring disposal facilities to implement Recycling Benefits Plans that lead them to take aggressive actions to increase source reduction, toxicity reduction, and recycling.
- Issuing final revised facility siting criteria that provide increased protection for sensitive receptors and resources.
- Revising the landfill design standards to require a double liner system with leak detection for all new disposal cells.

9. Why does DEP no longer favor combustion with energy recovery over landfilling?

Waste-to-energy combustion facilities were originally favored over landfills because combustion reduces the volume of waste, recovers energy, reduces pathogens, and offers considerable flexibility for adding new pollution control measures. The original preference was not based on a comparative risk analysis. DEP has reviewed some of the studies on potential risks from landfills versus combustors, and has found the literature to be inconclusive at this point in time. DEP believes that disposal technologies should be used only as a last resort, and since both combustion and landfilling have potential impacts that are difficult to quantify and compare, no preference should be made between the two.

10. Are applicants now seeking permits for new landfills/combustors?

In October 1999, DEP amended the 1997 Master Plan to allow for partial replacement disposal capacity at six landfills. Some of the disposal capacity allowed in the 1999 amendment is still in the permitting process.

Beyond the 1999 partial replacement capacity, no formal permit applications have been submitted to DEP. DEP is aware of a number of proposals for disposal capacity, but project proponents have not yet filed permit applications with DEP. The majority of these projects are expansions at existing facilities. In some cases, DEP has had preliminary meetings with proponents regarding their projects and has advised them that no permit applications will be considered until the Master Plan is finalized.

11. If an applicant did pursue a new landfill or combustor, when would the first facility come on line?

It is very difficult to predict when a project proponent might file a permit application with DEP. A new landfill or combustor would have to first satisfy the Massachusetts Environmental Policy Act (MEPA) process and obtain a site assignment from the local board of health, as well as address any other local zoning and/or permitting requirements. It can often take several years from the start of this process before a proponent files a permit application with DEP. Even expansions of existing facilities can take several years to complete, depending on whether MEPA, site assignment, and other local approvals are necessary.

12. Are the DEP regulations so stringent that no developer could possibly build a profitable facility?

No. DEP's revised site assignment regulations due in final form in September 2000 (which will increase setbacks from facilities to many sensitive receptors) and local zoning both limit where solid waste facilities can be sited. However, once a suitable site is obtained and a state-of-the-art facility is built, the facility can be profitable. Waste management companies would not pursue such projects otherwise. Prior to investing in such projects, project proponents develop business plan that evaluate siting, permitting, and operating costs relative to expected revenues from waste management contracts. If a profit cannot be made, the project would not be pursued.

13. How does DEP's Master Plan compare to the recommendations of the Massachusetts Coalition to Reduce Waste?

Our goals are very similar---we all want to reduce waste, and to reuse and recycle as much waste as possible, but the social and economic changes necessary to achieve "zero waste" or to virtually eliminate waste will not happen in the short term. We believe that our Plan moves us very strongly in the right direction and presents realistic goals and a realistic timeframe to achieve them. Because of the difference in timeframe for reducing our waste stream, our plan recognizes the need for some additional disposal capacity to replace the capacity that has been lost over the past few years due to the closure of older facilities.

Comparison of 1990 Solid Waste Master Plan and Beyond 2000 Solid Waste Master Plan

	<u>1990 Plan & Updates</u>	<u>2000 Plan</u>
Goals & Milestones	2000 Goals: <ul style="list-style-type: none"> • 10% source reduction of MSW • 46% recycling of MSW • 50% Combustion w/energy recovery • 4% landfill 	2010 Milestones: <ul style="list-style-type: none"> • 70% total waste reduction • 60% MSW waste reduction • 88% non-MSW waste reduction
In-state Management Capacity	<ul style="list-style-type: none"> • Maintain self-sufficiency (No net import or net export of trash) • Allow additional disposal capacity to meet management shortfalls 	<ul style="list-style-type: none"> • Maintain self-sufficiency (No net import or net export of trash) • Phase in disposal capacity on yearly schedule to meet no net export goal by 2006.
Waste Management Hierarchy	<ul style="list-style-type: none"> • Source reduction, recycling, combustion with energy recovery, landfilling as a last resort 	<ul style="list-style-type: none"> • Source reduction, recycling, followed by combustion with energy recovery and landfilling as equal last-resort options
Disposal Facilities	<ul style="list-style-type: none"> • Facility must demonstrate that at least 25% of the waste in the facility's service area is recycled • Initiative to close active unlined landfills 	<ul style="list-style-type: none"> • Facility must implement Recycling Benefits Plan for aggressive waste reduction • Increase stringency of facility siting criteria • Require double liner with leak detection for new landfill cells
Waste bans	<ul style="list-style-type: none"> • Phase-in of materials banned: automobile batteries; leaves & yard waste; tires; white goods; metal, glass and plastic containers; paper; cathode ray tubes 	<ul style="list-style-type: none"> • add to ban by 2003: unprocessed C&D waste • Consider additional material bans (e.g., food waste) • Increase enforcement

Key Waste Reduction Programs	<ul style="list-style-type: none"> • 10-point recycling strategy • Household Hazardous Waste Plan 	<ul style="list-style-type: none"> • Comprehensive waste reduction strategy (source reduction, toxicity reduction, recycling). • Product Stewardship Initiative • Organics (Food Waste) Reduction Initiative • C&D Waste Reduction Initiative
Legislation to pursue	<ul style="list-style-type: none"> • Toxics reduction in products (e.g., mercury) • Used oil recycling 	<ul style="list-style-type: none"> • Multi-family unit recycling access • Environmental Stewardship Initiative • Toxics reduction in products (e.g., mercury) • Used oil recycling